

Page 1 of 4 Procter & Gamble Fabric and Home Care Division Ivorydale Technical Center 5299 Spring Grove Avenue Cincinnati, OH 45217-1087

MATERIAL SAFETY DATA SHEET

MSDS:CT#FH/H/2004/SDSM-63LP6X CT#FH/H/2004/SDSM-5Z6NLW CT#FH/H/2004/LHLA-5WNSXU CT#FH/H/2004/LHLA-5WRM8K CT#FH/H/2003/LHLA-5V6NJ9 CT#FH/H/2003/LHLA-5SZP85 CT#FH/H/2003/LHLA-5SDQDB

Identity: Liquid Laundry Detergent

Brands: TIDE

(All variations)

Hazard Rating: 1

Health: 1

4=EXTREME

Flammability: 1

3=HIGH

Reactivity: 0

2= MODERATE

1=SLIGHT

0= NOT SIGNIFICANT

Issue Date: 08/30/04

Emergency Telephone Number: 24hr P&G Operator - 1-800-879-8433 or call Local Poison Control Center

Ingredients/Chemical Name: Biodegradable surfactants (anionic and nonionic) and enzymes.

Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200.

Chemical Name	<u>Common</u> <u>Name</u>	CAS No.	Recommended Limits	Composition Range	<u>LD50/LC5</u> <u>0</u>
Ethyl alcohol	Ethanol	64-17-5	ACGIH TWA: 1880 mg/m ³ OSHA PEL & TWA: 1900 mg/m ³	1-5%	NA
Sodium borate	Borax	1330-43-4	ACGIH TWA: 5mg/m ³	1 – 5%	NA
2- Aminoethanol	Ethanolamine	141-43-5	ACGIH TWA: 7.5 mg/m ³ ACGIH STEL: 15 mg/m ³ OSHA PEL: 6 mg/m ³ OSHA TWA: 8 mg/m ³ OSHA STEL: 15 mg/m ³	0.5 – 1.5%	NA

Health Hazards (Acute and Chronic):

Ingestion:

May cause transient gastrointestinal irritation.

Eye Contact:

May cause mild, transient irritation.

Inhalation:

Transient irritation with prolonged exposure to concentrated material.

Signs and Symptoms of Exposure:

Ingestion:

May result in nausea, vomiting, and/or diarrhea.

Eye Contact:

May cause stinging, tearing, itching, swelling, and/or redness.

Skin:

Prolonged contact with concentrated material may be drying or transiently irritating to skin.

Emergency and First Aid Procedures:

Ingestion:

Drink a glassful of water.

Eye Contact:

Flush with water for 10 to 15 minutes.

Skin:

If prolonged contact occurs, rinse thoroughly with water. If spilled on clothing, change

clothes.

If symptoms persist or reoccur, seek medical attention.

Other: Consumer product package has a caution statement: "CAUTION: Eye irritant. Harmful if swallowed. KEEP OUT OF REACH OF CHILDREN. If swallowed, give a glassful of water. Call a physician. In case of

eye contact, flush with water."

Flash Point (Method Used): | 150°F PM CC

CC Explosive Limits:

LEL: N/A

UEL: N/A

Extinguishing Media: CO2, water

Special Fire Fighting Procedures:. None.

Unusual Fire Hazards: None. This product has a flash point above 150°F. It is an aqueous solution containing

ethyl alcohol and it does not sustain combustion.

Stability

Unstable:

Conditions to Avoid: None

Stable: X

Incompatibility (Materials to Avoid): None known
Hazardous Decomposition/By Products: None known

Hazardous Polymerization:

May Occur:

Conditions to Avoid: None

Will Not Occur: X

Personal Precautions: None

Environmental Precautions: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL

REGULATIONS. Small or household quantities may be disposed of in refuse or in sewer. First check with your local water treatment plant. For larger quantities, incineration is preferred. Do not landfill.

Steps To Be Taken in Case Material is Released or Spilled: Flush small or household quantities down acceptable sewer (contains biodegradable surfactants). Prevent spills from reaching a waterway. Sorbents may be used.

Precautions To Be Taken in Handling and Storing: No unusual precautions necessary.

Other Precautions: None

TIDE LIQUID LAUNDRY DETERGENT MSDS (Continued)

Respiratory Protection (Specify Type): None required with normal use.

Ventilation Local Exhaust: None required with normal consumer use.

Special: None

Mechanical (General): Normal/general dilution ventilation is acceptable.

Other: None

Eye Protection: None required with normal consumer use.

Industrial Setting: If a splash is likely, chemical goggles may be needed.

Protective Gloves: None required with normal use.

Industrial Setting: Protective gloves (rubber, neoprene) should be used for prolonged direct contact.

Other Protective Equipment: None required with normal use.

Boiling Point °F: 205-207°F

Vapor Pressure (mm Hg): <29.4

Vapor Density (Air=1): Unknown

Odor Threshold: N/A

Coefficient of Water/Oil Distribution: N/A

Scooped Density: N/A

Appearance and Odor: Tide Free and Tide High Efficiency Free are straw yellow color. Tide High Efficiency, Reg./Orig. Scent Tide, Tide Mtn Spring, Tide Clean Breeze, Tide High Efficiency Clean Breeze, Tide 'Deep Clean', Tide Fresh Scent, Tide Tropical Clean, and All Tide w/Bleach Alternative ColorSafe Bleaching Action, Tide ColdWater, Tide ColdWater Glacier, and Tide with a Touch of Downy products are blue in color. All Liquid Tide products are perfumed, except for Tide Free and Tide High Efficiency Free.

Specific Gravity (H₂O=1): 1.051 to 1.080

Percent Volatile by Volume (%): 60.99%-61.66%

Evaporation Rate (nBuOAc=1): Unknown

Freezing Point: N/A

pH (10% solution): 8.1 to 8.6

Solubility in Water: Completely soluble.

Reserve Alkalinity: N/A

Possible Hazardous Reactions/Conditions: None known

Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: None known

Other Recommendations: None

Waste Disposal Method: Disposal is to be performed in compliance with all Federal, state and local regulations. Small or household quantities may be disposed of in refuse or in sewer. First check with your local water treatment plant. For larger quantities, incineration is preferred. Do not landfill.

The finished product is non-hazardous under DOT.

All components are listed on the US TSCA Inventory. No components are affected by Significant New Use Rules (SNURs) under TSCA §5.

Liquid Tide products do not require labeling under California Proposition 65.

All ingredients are CEPA approved for import to Canada by Procter & Gamble. This product has been classified with Hazard Criteria of the Canadian Control Products Regulation (CPR) and this MSDS contains all information required by the Canadian Products Regulation.

*N/A. - Not Applicable

*N/K. - Not Known

The submission of this MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health.

The information contained herein has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific material designated herein, and does not relate to the use in combination with any other material or any other process. Procter & Gamble assumed no responsibility for injury to the recipient or third persons, for any damage to any property resulting from misuse of the controlled product.

Liquid Tide formulas have a low order of toxicity. If ingested, it may be mildly irritating. It is expected to be moderately emetic.

LD50 (oral, estimated): > 2g/kgED50 (emesis, estimated): $\sim 0.5 g/kg$

This mixture is considered to be a moderate irritant to eyes and a slight irritant to skin. Repeated inhalation of aerosols may result in sensitization (skin prick test positive) to one or more enzyme proteins. For sensitized persons, subsequent inhalation of aerosols may result in transient "hay-fever-like" symptoms (watery eyes and/or nose, scratchy throat) and/or transient "asthma-like symptoms" [chest tightness and difficulty in breathing caused by bronchoconstriction (narrowing of the airways)].

Based on ecotoxicity and fate data for the individual ingredients in this specific formulation and for related consumer household cleaning product formulations, it is expected that this product would exhibit a non-hazardous order of toxicity at relevant environmental concentrations.